

Infection Prevention Risk Assessment

Matrix of Precautions for Construction & Renovation

Project: Replace Floors in Restrooms

Step One:

Using the following table, *identify* the Type of Construction Project Activity (Type C)

TYPE A	<p>Inspection and Non-Invasive Activities.</p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet ▪ painting (but not sanding) ▪ wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
TYPE B	<p>Small scale, short duration activities which create minimal dust</p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ installation of telephone and computer cabling ▪ opening of no more than 1 tile per 10 square feet ▪ access to chase spaces ▪ cutting of walls or ceiling where dust migration can be controlled. ▪ minor renovation of existing space ▪ wet sanding of walls ▪ floor covering removal (without sanding or grinding)
TYPE C	<p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies</p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ dry sanding of walls for painting or wall covering ▪ removal of floor coverings (with sanding), ceiling tiles and casework ▪ cutting of walls, removal of drywall or building finishes where work is limited to one room or suite ▪ new wall construction ▪ minor duct work, plumbing work, or electrical work above ceilings (not including system demolition or installation) ▪ moderate renovation of existing space ▪ major cabling activities ▪ any activity which cannot be completed within a single workshift.
TYPE D	<p>Major demolition and construction projects</p> <p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ activities which require the closure of a unit/wing or relocation of an entire area ▪ activities which require consecutive work shifts ▪ demolition, removal, or installation of a complete cabling, HVAC, plumbing, medical gas, or electrical system ▪ demolition of major fixed building components, assemblies, fit-out elements, or structural elements ▪ new construction located in close proximity (as determined by the ICRA team) of the hospital building ▪ outdoor construction of new structures located in close proximity to existing patient care facility ▪ excavation activities within close proximity of hospital building. ▪ new construction.

Step Two:

Using the following table, *identify the Patient Risk Groups* that will be affected.

If more than one risk group will be affected, select the higher risk group:

Low Risk	Medium Risk	High Risk	Highest Risk
<ul style="list-style-type: none"> Office areas Mechanical spaces Hallway in basement by offices. 	<ul style="list-style-type: none"> Cardiology Echocardiography Endoscopy Nuclear Medicine Physical Therapy Radiology/MRI/CT/PET Respiratory Therapy Primary care spaces Community Based outpatient clinics 	<ul style="list-style-type: none"> Emergency Room Laboratories (specimen) Outpatient Surgery Pediatrics Pharmacy Post Anesthesia Care Unit Surgical Units Central Sterile supply storage Canteen/Kitchen 	<ul style="list-style-type: none"> Any area caring for immunocompromised patients Cardiac Cath Lab Sterile Processing Intensive Care Units Medical Units Negative pressure isolation rooms Oncology Operating rooms PACU Community Living Center

Step 2 _____

Step Three: Match the

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ...

Construction Project Type (*A, B, C, D*) on the following matrix, to find the ...

Class of Precautions (*I, II, III or IV*) or level of infection control activities required.

Class I-IV or **Color-Coded Precautions** are delineated on the following page.

IC Matrix - Class of Precautions: Construction Project by Patient Risk

Patient Risk Group	Construction Project Type			
	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	II	II	III/IV
MEDIUM Risk Group	I	II	III	IV
HIGH Risk Group	I	II	III/IV	IV
HIGHEST Risk Group	II	III/IV	III/IV	IV

Note: Infection Prevention approval will be required when the Construction Activity and Risk Level indicate that **Class III** or **Class IV** control procedures are necessary.

Step 3 _____

Description of Required Infection Prevention Precautions by Class
During Construction Project **Upon Completion of Project**

CLASS I	<ol style="list-style-type: none"> 1. Execute work to minimize the rise of dust from construction operation. 2. Immediately replace any ceiling tile displaced for inspection. 	<ol style="list-style-type: none"> 1. Clean work area upon completion of task.
CLASS II	<ol style="list-style-type: none"> 1. Provides active means to prevent air-borne dust from dispersing into atmosphere (surrounding environment.) 2. Water mist work surface to control dust while cutting 3. Seal unused doors with duct tape. 4. Block off and seal duct vents. 5. Wipe surfaces with disinfectant. 6. Contain construction waste before transport in tightly covered containers. 7. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 8. Place dust mat at entrance and exit of work area. 9. Remove or isolate HVAC system in area where work is being performed. 	<ol style="list-style-type: none"> 1. Wipe work surfaces with disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 4. Remove isolation of HVAC system in areas where work is being performed.
CLASS III	<ol style="list-style-type: none"> 1. Obtain infection control permit before construction begins. 2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 3. Complete all critical barriers or implement control cube method before construction begins. 4. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 5. Remove or isolate HVAC systems in area where work is being performed. 6. Do not remove barriers from work site until complete and project is thoroughly cleaned by EMS. 7. Vacuum work with HEPA filtered vacuum. 8. Wet mop with disinfectant. 9. Remove barrier material carefully to minimize spreading of dust and debris associated with construction. 10. Contain construction waste before transport in tightly covered containers. 11. Cover transport receptacles or cart and tape covering in place. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Coordinator and thoroughly cleaned by (EMS) Environmental Management Services. 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant. 5. Remove isolation of HVAC system in areas where work is being performed.
CLASS IV	<p>Same as Class III plus the following:</p> <ol style="list-style-type: none"> 1. Seal holes, pipes, conduits and penetrations appropriately. 2. Construct anteroom & require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving worksite or they can wear cloth or paper coveralls that are removed each time they leave the work site. 3. Wear shoe covers when within entering work site. 	<p>Same as above plus:</p> <ol style="list-style-type: none"> 1. Contain construction waste before transport in tightly covered containers. 2. Cover transport receptacles or carts. Tape covering unless solid lid 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant.

Step 4. Identify the areas surrounding the project area, assessing potential impact

Unit Below	Unit Above	Lateral	Lateral	Behind	Front
none	Hallway MHC	Offices/ storage EMS	n/a	Hallway to shops	Hallway to silver elevator
Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group

Step 5. Identify specific site of activity eg, patient rooms, medication room, etc.

Hallway in basement from silver elevators to shops.

Step 6. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages. no anticipated outages.**Step 7. Identify containment measures, using prior assessment. What types of barriers? (Eg, solids wall barriers); Will HEPA filtration be required?**

Plastic Containment on the outside of each restroom with a HEPA air filtering system needs to be existed to the outside window or barrel of water.

(Note: Renovation/construction area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas)

Step 8. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (eg, wall, ceiling, roof) fire safety issues to be determined by safety when ceiling is down.**Step 9. Work hours: Can or will the work be done during non-patient care hours?****Step 10. Do plans allow for adequate number of isolation/negative airflow rooms? n/a****Step 11. Do the plans allow for the required number & type of handwashing sinks? n/a****Step 12. Does the infection control staff agree with the minimum number of sinks for this project?**
(Verify against AIA Guidelines for types and area) **n/a****Step 13. Does the infection control staff agree with the plans relative to clean and soiled utility rooms? n/a****Step 14. Plan to discuss the following containment issues with the project team.**

Eg, traffic flow, housekeeping, debris removal (how and when),
Debris in closed container transport out thru the loading dock.

Appendix: Identify and communicate the responsibility for project monitoring that includes infection control concerns and risks. The ICRA may be modified throughout the project. Revisions must be communicated to the Project Manager